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An Appendix including the amended drawing figure is attached following page 13 of this paper.

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-6 (canceled)

Claim 7 (currently amended) A method for detecting the presence of a transponder in the proximity of a device provided with an antenna, comprising the steps consisting in:

generating a series of pulses and feeding said antenna with said pulses;

detecting the damped oscillations of said antenna;

determining the presence/absence of said transponder on the basis of the characteristics of said oscillations,

wherein said detecting comprises counting the number of said damped oscillations whose amplitude exceeds a preset threshold, said number being lower if said transponder is in the vicinity of said antenna with respect to when said transponder is not present.

Claim 8 (original) The method according to claim 7, wherein said device provided with an antenna is a device for reading/writing said transponder.

Claims 9-10 (canceled)

Claim 11 (original) The method according to claim 7, wherein the step consisting in feeding said antenna with said pulses comprises varying the number of said pulses and/or the amplitude of said pulses and/or the duration of said pulses so as to obtain

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damped oscillations of said antenna having a constant amplitude in the absence of said transponder, regardless of the type of antenna and of the environmental conditions.

Claim 12 (original) The method according to claim 7, wherein the step consisting in feeding said antenna with said pulses comprises varying the number and/or amplitude and/or duration of said pulses, so as to keep constant the number of damped oscillations of said antenna.

Claim 13 (original) The method according to claim 7, comprising the steps consisting in:

- storing the average amplitude of said damped oscillations of the antenna detected over a given time interval;

- comparing the stored average amplitude with the detected instantaneous amplitude and detecting significant variations of said instantaneous amplitude that indicate the presence of said transponder.

Claim 14 (original ) The method according to claim 7, comprising the steps consisting in:

- storing the average number of said damped oscillations of the antenna detected over a given time interval;

- comparing said average number of damped oscillations with the detected number of oscillations and detecting significant variations of said number of oscillations that indicate the presence of said transponder.

Claim 15 (new) A device for detecting the presence of a transponder in its proximity, comprising:

- an antenna;
- pulse generation means;
- means adapted to feed said antenna with said pulses;

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- means for measuring the damped oscillations of said antenna as a consequence of being fed with said pulses;
- said means for measuring the damped oscillations of said antenna being suitable to determine whether a transponder is present or not in the proximity of said antenna by counting the number of said damped oscillations whose amplitude exceeds a preset threshold, said number being lower if said transponder is in the vicinity of said antenna with respect to when said transponder is not present.

Claim 16 (new) The device according to claim 15, wherein said device is a device for reading/writing said transponder and said antenna is the antenna of said read/write device.

Claim 17 (new) The device according to claim 15, wherein said pulse generation means comprise a microprocessor or a microcontroller.

Claim 18 (new) The device according to claim 15, wherein said means for measuring the damped oscillations of said antenna comprise a microprocessor or a microcontroller.

Claim 19 (new) The device according to claim 15, wherein said means for feeding said antenna with said pulses comprise a microprocessor or a microcontroller.

Claim 20 (new) The device according to claim 15, wherein said pulse generation means generate a series of synchronous pulses.

Claim 21 (new) A method for detecting the presence of a transponder in the proximity of a device provided with an antenna, comprising the steps consisting in:

- generating a series of pulses and feeding said antenna with said pulses;
- detecting the damped oscillations of said antenna;
- determining the presence/absence of said transponder on the basis of the characteristics of said oscillations,

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wherein the step consisting in feeding said antenna with said pulses comprises varying the number of said pulses and/or the amplitude of said pulses and/or the duration of said pulses so as to obtain damped oscillations of said antenna having a constant amplitude in the absence of said transponder, regardless of the type of antenna and of the environmental conditions.

Claim 22 (new) The method according to claim 21, wherein said device provided with an antenna is a device for reading/writing said transponder.

Claim 23 (new) The method according to claim 21, wherein the step consisting in detecting the damped oscillations of said antenna comprises the step consisting in determining the amplitude of the damped oscillations of said antenna.

Claim 24 (new) A device for detecting the presence of a transponder in its proximity, comprising:

- an antenna;
- pulse generation means;
- means adapted to feed said antenna with said pulses;
- means for measuring the damped oscillations of said antenna as a consequence of being fed with said pulses;
- said means for measuring determining whether a transponder is present or not in the proximity of said antenna on the basis of the characteristics of said damped oscillations, wherein said means for measuring the damped oscillations of said antenna being suitable to vary the number of said pulses and/or the amplitude of said pulses and/or the duration of said pulses so as to obtain damped oscillations of said antenna having a constant amplitude in the absence of said transponder, regardless of the type of antenna and of the environmental conditions.

Claim 25 (new) A method for detecting the presence of a transponder in the proximity of a device provided with an antenna, comprising the steps consisting in:

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generating a series of pulses and feeding said antenna with said pulses;  
detecting the damped oscillations of said antenna;  
determining the presence/absence of said transponder on the basis of the characteristics of said oscillations,  
wherein the step consisting in feeding said antenna with said pulses comprises varying the number and/or amplitude and/or duration of said pulses, so as to keep constant the number of damped oscillations of said antenna whose amplitude exceeds a preset threshold.

Claim 26 (new) A device for detecting the presence of a transponder in its proximity, comprising:  
- an antenna;  
- pulse generation means;  
- means adapted to feed said antenna with said pulses;  
- means for measuring the damped oscillations of said antenna as a consequence of being fed with said pulses,  
- said means for measuring determining whether a transponder is present or not in the proximity of said antenna on the basis of the characteristics of said damped oscillations, wherein said means for measuring the damped oscillations of said antenna being suitable to vary the number and/or amplitude and/or duration of said pulses, so as to keep constant the number of damped oscillations of said antenna whose amplitude exceeds a preset threshold.

Claim 27 (new) A method for detecting the presence of a transponder in the proximity of a device provided with an antenna, comprising the steps consisting in:  
generating a series of pulses and feeding said antenna with said pulses;  
detecting the damped oscillations of said antenna;  
determining the presence/absence of said transponder on the basis of the characteristics of said oscillations by storing the average amplitude of said damped oscillations of the antenna detected over a given time interval, comparing the stored

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average amplitude with the detected instantaneous amplitude and detecting significant variations of said instantaneous amplitude that indicate the presence of said transponder.

Claim 28 (new) A device for detecting the presence of a transponder in its proximity, comprising:

- an antenna;
- pulse generation means;
- means adapted to feed said antenna with said pulses;
- means for measuring the damped oscillations of said antenna as a consequence of being fed with said pulses;
- said means for measuring the damped oscillations of said antenna being suitable to determine the presence/absence of said transponder on the basis of the characteristics of said oscillations by storing the average amplitude of said damped oscillations of the antenna detected over a given time interval, comparing the stored average amplitude with the detected instantaneous amplitude and detecting significant variations of said instantaneous amplitude that indicate the presence of said transponder.

Claim 29 (new) A method for detecting the presence of a transponder in the proximity of a device provided with an antenna, comprising the steps consisting in:

- generating a series of pulses and feeding said antenna with said pulses;
- detecting the damped oscillations of said antenna;
- determining the presence/absence of said transponder on the basis of the characteristics of said oscillations by storing the average number of said damped oscillations of the antenna detected over a given time interval and whose amplitude exceeds a preset threshold, comparing said average number of damped oscillations with the detected number of oscillations whose amplitude exceeds a preset threshold and detecting significant variations of said number of oscillations that indicate the presence of said transponder.

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Claim 30 (new) A device for detecting the presence of a transponder in its proximity, comprising:

- an antenna;
- pulse generation means;
- means adapted to feed said antenna with said pulses;
- means for measuring the damped oscillations of said antenna as a consequence of being fed with said pulses;
- said means for measuring the damped oscillations of said antenna being suitable to determine the presence/absence of said transponder on the basis of the characteristics of said oscillations by storing the average number of said damped oscillations of the antenna detected over a given time interval and whose amplitude exceeds a preset threshold, comparing said average number of damped oscillations with the detected number of oscillations whose amplitude exceeds a preset threshold and detecting significant variations of said number of oscillations that indicate the presence of said transponder.